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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,453	08/18/2000	Kyle Granger	10053-137-999	7125

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EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 11/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,453

Applicant(s)

GRANGER ET AL.

Examiner

Hanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed on 8/18/00.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 10, 11, 17, 20, 21, 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 10 and 20, it is not clear what it means by:

“a first quanta of compressed digital data having a first degree of said characteristic”;

“a second quanta of compressed digital data having a second degree of said characteristic”; and

“their existing an overlap between said first amount of said voice signal and said second amount of said voice signal” .

Claims 11 and 21 are rejected because it depends on claims 10 and 20 respectively.

In claims 7, 17 and 27, it is not clear what it means by “ the first form and the second form represented in said data structure in unequal duration amount”.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11-19 and 22 are rejected under 35 USC 103(a) as being unpatentable over **Gao et al.** (US Pat. No. 6,604,070 B1) in view of **Parry et al.** (US Pat. No. 6,603,501 B1).

In claims 1, 8, 9, 13 and 19, **Gao et al.** discloses, in Fig.1, an encoder 12 of a VOIP wireline device receiving digitized speech 18 (receiving digitized speech). See col.6, lines 35-42. The digitized speech 18 represents voice speech, unvoiced speech, noise and music (digitized speech representing in a plural forms in data structures) and indicates a portion of the digitized speech to be encoded. See col.6, lines 40-43 & col.7, line 63 to col.8, line 5. In Fig.2, encoder 12 uses a module 44 to analyzes the digitized speech 18, and selects one of the codecs 22, 24, 26, 28 to encode the digitized speech (analyzing the data structure to select one of data structure forms). See col.7, lines 60-67 & col.13, lines 40-45. The encoded digitized speech corresponds to a desired rate (aspect of the forum) (data structure that corresponds to a selected form of data structure) is transmitted to a decoder 16 (forwarding a portion of data structure to a receiving participant for communicating the digitized speech). See col.7, lines 1-20. **Gao et al.** does not disclose the forwarding of data is based on an aspect of the forum. **Parry et al.** discloses a video teleconference transferring signals from a sender 200 to a receiver 300. The sender sends encoded audio signal based upon the status of receiver 300 (aspect of the forum is a status of a receiving participant), the status of network (aspect of the forum). See Abstract & col.5, lines 10-30. Therefore, it would have been obvious to one skill in the art to apply the transmitting encoded audio signals to a receiver based upon the status of the receiver into **Gao et al.** in order to enhance bandwidth for transmitting encoded speech to other receiver.

In claims 2 and 14, **Gao et al.** discloses, in Fig.1, a plurality of codecs 22, 24, 26, 28 corresponding to the characteristics of received digitized speech such as bandwidth, desired rate

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(a plurality of forms characterized by a different codec that corresponding to digitized speech).

See col.7, lines 37-50.

In claims 3, 11 and 15, **Gao et al.** discloses, in Fig.1, each of codecs 22, 24, 26, 28 represents a selection of rate (bit rates); bandwidth (transmitted bandwidth); frame size (frame size) and .etc. (each data form characterized by transmitted bandwidth, bit rate, frame size). See col.7, lines 45-50, 60-67, col.6, lines 50-55.

In claims 4 and 16, **Gao et al.** discloses, in Fig.1, the digitized speech 18 represents voice speech (first form), unvoiced speech (second form) (digitized speech represent in a first form and a second form). See col.6, lines 37-43. The unvoiced speech (second form) is encoded with quarter rate codec 26 (a second codec). The voice speech (first form) is encoded with a full rate codec 22 (a first codec). See col.8, lines 12-17 & lines 22-27. The full rate codec 22 represents 8.5 Kbps (first bandwidth) and quarter rate codec 26 (second codec) represents 2.0 Kbps (second Bandwidth) (first codec characterized by a first bandwidth; and second codec characterizes a second bandwidth). See col.7, lines 55-65.

In claims 5, 6, 7 and 17, **Gao et al.** discloses most of the limitations in claim 4. **Gao et al.** further discloses the full rate codec 22 (first codec) generates 170 bits per frame (first codec operates with a first frame length); and the quarter rate codec 26 (second codec) generates 40 bits per frame (second codec operates with a second frame length). See col.7, lines 50-55. From the above frame lengths, the frames length of voice speech (first form) and the unvoice speech (second form) are different.

In claims 12, 18 and 22, the limitations of these claims have been addressed in claims 1 and 8.

Claims 21, 23-29, 31 and 32 are rejected under 35 USC 103(a) as being unpatentable over **Gao et al.** (US Pat. No. 6,604,070 B1), in view of **Parry et al.** (US Pat. No. 6,603,501 B1), and further in view of **Riddle** (US Pat. No. 6,175,856).

In claims 23 and 29, **Gao et al. and Parry et al.** discloses all the claimed limitations, but not disclose that the claimed limitations are performed under executable instructions in the memory. **Riddle** discloses a teleconference between a sender and a receiver as shown in Fig.6. The sender and the receiver, each comprises computer program instructions stored in memories 601, 630 such as a RAMs respectively. The computer program instructions includes a list of compressors selected to encode digitized voice based upon bandwidth of compressor. See Fig.5 & Fig.6. Therefore, it would have been obvious to one skills in the art to perform the steps of **Gao et al.** by programming and storing the steps as the executable instructions into the memory of **Riddle** in order to execute the program steps. The motivation is for performing teleconference between participants via VOIP network.

In claim 24, **Gao et al.** discloses, in Fig.1, a plurality of codecs 22, 24, 26, 28 corresponding to the characteristics of received digitized speech such as bandwidth, desired rate (a plurality of forms characterized by a different codec that corresponding to digitized speech). See col.7, lines 37-50.

In claims 21, 25 and 31, **Gao et al.** discloses, in Fig.1, each of codecs 22, 24, 26, 28 represents a selection of rate (bit rates); bandwidth (transmitted bandwidth); frame size (frame size) and .etc. (each data form characterized by transmitted bandwidth, bit rate, frame size). See col.7, lines 45-50, 60-67, col.6, lines 50-55.

In claim 26, **Gao et al.** discloses, in Fig.1, the digitized speech 18 represents voice speech (first form), unvoiced speech (second form) (digitized speech represent in a first form and a second form). See col.6, lines 37-43. The unvoiced speech (second form) is encoded with quarter rate codec 26 (a second codec). The voice speech (first form) is encoded with a full rate codec 22 (a first codec). See col.8, lines 12-17 & lines 22-27. The full rate codec 22 represents 8.5 Kbps (first bandwidth) and quarter rate codec 26 (second codec) represents 2.0 Kbps (second Bandwidth) (first codec characterized by a first bandwidth; and second codec characterizes a second bandwidth). See col.7, lines 55-65.

In claim 27, **Gao et al.** discloses most of the limitations in claim 4. **Gao et al.** further discloses the full rate codec 22 (first codec) generates 170 bits per frame (first codec operates with a first frame length); and the quarter rate codec 26 (second codec) generates 40 bits per frame (second codec operates with a second frame length). See col.7, lines 50-55. From the above frame lengths, the frames length of voice speech (first form) and the unvoice speech (second form) are different.

In claims 28 and 32, the limitations of these claims have been addressed in claims 1 and 8.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure..

Kozdon et al. (US Pat. No. 6,240,070 B1) discloses System and Method for Improving Audio Quality on a Conferencing Network.

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Alperovich et al. (US Pat. No. 6,600,738 B1) discloses Routing an IP network Based on Codec Availability and Subscriber Preference.

Vargo et al. (US Pat. No. 6,356,545 B1) discloses Internet telephone System with Dynamically Varying Codec.

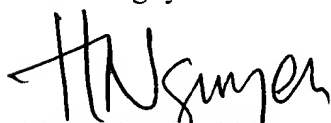
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 703 306-5445. The examiner can normally be reached on Monday-Friday 8:30 AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703 306-4744. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-3988 for regular communications and 703 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305-4700.

Fax number: 703 872-9314

Hanh Nguyen



November 20, 2003